

## **Kearny County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/26/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 12 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Kearny County economy.<sup>1</sup>

These 12 sectors have a total direct output of approximately \$272.1 million and support 641.0 jobs in Kearny County. Running the model for all 12 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Kearny County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional	Output <sup>5</sup>	Output % of Gross Regional Product			
				Product <sup>4</sup>		rroduct			
Direct Effect	641.0	28.98%	\$60,762,840	41.14%	\$272,106,319	184.23%			
Indirect Effect	170.4	7.70%	\$8,875,084	6.01%	\$17,218,345	11.66%			
Induced Effect	92.5	4.18%	\$7,614,897	5.16%	\$14,078,050	9.53%			
Total Effect	903.9	40.86%	\$77,252,821	52.30%	\$303,402,714	205.41%			

As shown in the above table, agriculture, food, and food processing sectors support 903.9 jobs, or 40.86% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$303.4 million, roughly 205.41% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 12 agriculture, food, and food processing sectors is approximately \$77.3 million, or 52.30% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 52.30% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

 $<sup>5 \</sup>text{ Output} = \text{intermediate inputs} + \text{value added}.$ 

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **370.2 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Kearny County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	370.2	\$127,279,997			
Support activities for agriculture and forestry	82.5	\$5,151,973			
Animal, except poultry, slaughtering	80.1	\$59,873,613			
All other crop farming	77.4	\$13,607,230			
Grain farming	72.5	\$59,971,749			
Truck transportation	28.4	\$4,054,929			
Animal production, except cattle and poultry and eggs	19.8	\$4,248,594			
Dairy cattle and milk production	14.0	\$3,857,679			
Monetary authorities and depository credit intermediation	11.8	\$1,795,004			
Limited-service restaurants	8.6	\$527,620			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$127.3 million to the Kearny County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	370.2	\$127,279,997			
Grain farming	72.5	\$59,971,749			
Animal, except poultry, slaughtering	80.1	\$59,873,613			
All other crop farming	77.4	\$13,607,230			
Owner-occupied dwellings	0.0	\$6,327,626			
Support activities for agriculture and forestry	82.5	\$5,151,973			
Animal production, except cattle and poultry and eggs	19.8	\$4,248,594			
Truck transportation	28.4	\$4,054,929			
Dairy cattle and milk production	14.0	\$3,857,679			
Oilseed farming	0.7	\$2,103,877			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Kearny County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	0.7	\$2,103,876.83		
Grain farming	72.5	\$59,971,748.35		
Vegetable and melon farming	0.4	\$70,543.95		
Cotton farming	0.7	\$142,519.68		
All other crop farming	77.4	\$13,607,230.19		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	370.2	\$127,279,991.15		
Dairy cattle and milk production	14.0	\$3,857,678.89		
Poultry and egg production	0.8	\$547,214.87		
Animal production, except cattle and poultry and eggs	19.8	\$4,248,594.28		
Animal, except poultry, slaughtering	80.1	\$59,873,611.45		
Bread and bakery product, except frozen, manufacturing	0.6	\$66,282.38		
Veterinary services	3.8	\$337,018.73		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kearny County, the retail sector was omitted.